

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Cancel claims 1-10.

Claim 11 (new): A high-frequency semiconductor device comprising:

a ground plate extending over a semiconductor substrate throughout with an insulation film intervening therebetween;

a plurality of line conductors provided on said ground plate, forming a multiple layer structure with the intervention of interlayer insulation films, each of said interlayer insulation films being composed of a resin insulating material, and each of said line conductors forming a micro-strip line in conjunction with said ground plate, wherein said plurality of line conductors include one line conductor provided on the upper surface of the most upper one of said interlayer insulation films;

a pad provided on said upper surface of said most upper one of said interlayer insulation films; and

a groove provided in said most upper one of said interlayer insulation films, between said pad and said one line conductor on said upper surface of said most upper one of said interlayer insulation films, and adjacent to and surrounding said pad.

Claim 12 (new): A high-frequency semiconductor device as set forth in claim 11, wherein said groove is partially disposed in a region between said pad and said one line conductor on said upper surface of the most upper one of said interlayer insulation films.

Claim 13 (new): A high-frequency semiconductor device as set forth in claim 12, wherein said pad has an edge closely facing to the periphery of said semiconductor substrate, and wherein said groove is formed in a region of said upper surface of said most upper one of said interlayer insulation films, except the region between said edge of said pad and said periphery of said semiconductor substrate.

Claim 14 (new): A high-frequency semiconductor device as set forth in claim 11, wherein said groove is divided into a plurality of portions with at least one gap provided across said groove.

Claim 15 (new): A high-frequency semiconductor device as set forth in claim 14, wherein said one line conductor on said upper surface of said most upper one of said interlayer insulation films extends to pass through said gap and connects with said pad.

Claim 16 (new): A high-frequency semiconductor device comprising:
a ground plate extending over a semiconductor substrate throughout with an insulation film intervening therebetween;

a plurality of line conductors provided on said ground plate, forming a multiple layer structure with the intervention of interlayer insulation films, each of said interlayer insulation films being composed of a resin insulating material, and each of said line conductors forming a micro-strip line in conjunction with said ground plate, wherein said plurality of line conductors include one line conductor provided on the upper surface of the most upper one of said interlayer insulation films;

a plurality of pads arranged in series on said upper surface of said most upper one of said interlayer insulation films, adjacent to and along the periphery of said semiconductor substrate; and

a groove having a ring shape, said groove being provided in said most upper one of said interlayer insulation films, inside the serial arrangement of said plurality of pads, between said pads and said one line conductor on said upper surface of said most upper one of said interlayer insulation films, and adjacent to said pads.

Claim 17 (new): A high-frequency semiconductor device as set forth in claim 11, further comprising a through-hole provided in said most upper one of said interlayer insulation films, for connecting said pad on said upper surface of said most upper one of said interlayer insulation films to one said line conductor extending thereunder.

Claim 18 (new): A high-frequency semiconductor device as set forth in claim 11, wherein said interlayer insulation film is composed of a polyamide or a benzocyclobutene.

Claim 19 (new): A high-frequency semiconductor device having micro-strip lines, comprising:

a ground plate extending over a semiconductor substrate with an insulation film intervening therebetween;

a plurality of line conductors provided on said ground plate, forming a multiple layer structure with the intervention of interlayer insulation films including one provided between said ground plate and the lowest one of said line conductors, each of said interlayer insulation films being composed of a resin insulating material, said plurality of line conductors including one formed on the upper surface of the most upper one of said interlayer insulation films;

a pad provided on said upper surface of said most upper one of said interlayer insulation films; and

a groove provided in said most upper one of said interlayer insulation films, between said pad and one said line conductor on said upper surface of said most upper one of said interlayer insulation films.

Claim 20 (new): A high-frequency semiconductor device as set forth in claim 16, further comprising a through-hole provided in said most upper one of said interlayer insulation films, for connecting said pad on said upper surface of said most upper one of said interlayer insulation films to one said line conductor extending thereunder.

Claim 21 (new): A high-frequency semiconductor device as set forth in claim 16,

wherein said interlayer insulation film is composed of a polyamide or a benzocyclobutene.